



9" HID OFF-ROAD LIGHT

Model 95059

INSTALLATION AND OPERATION INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally.
Due to continuing improvements, actual product may differ slightly from the product described herein.

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**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

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For technical questions or replacement parts, please call 1-800-444-3353.

Specifications

Construction	High Impact Plastic Body with Tempered Glass Lens, Polystyrene Lens Guard
Power Requirement	12 VDC, 3 A, 5A Fuse (included)
Bulb Color	Blue
Bulb Type	H7 6000 k
Total Weight	3.2 lb.
Light Dimensions	6-3/4" D x 9" W x 9-5/8" H

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using equipment, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before installing or using!

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate automotive accessories in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Batteries and automotive accessories may create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away from the installation area.** Distractions can cause you to lose control. Protect others in the work area from debris such as corrosion materials and sparks. Provide barriers or shields as needed.
4. **Do not abuse the Power Cord. Never use the Power Cord to carry the lights. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of fire.
5. **Stay alert. Watch what you are doing, and use common sense when operating a automotive accessory. Do not use a automotive accessory while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating a automotive accessory may result in serious personal injury.
6. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving engine parts.** Loose clothes, jewelry, or long hair can be caught in moving engine parts.
7. **Use safety equipment. Always wear eye protection.** Dust mask, nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. ANSI-approved goggles and heavy work gloves should be worn during installation.

8. **Use only with vehicles with 12 volt DC electrical systems.**
9. **Turn vehicle ignition off before making cable connections.** Vehicle's engine must be cooled down before making cable connections.
10. **Disconnect the battery cables before installing Off Road lights or changing bulbs.** Such preventive safety measures reduce the risk of accident.
11. **Keep automotive accessory maintained and clean.** Do not use a damaged automotive accessory. Tag damaged automotive accessories "Do not use" until repaired.
12. **Avoid contact with Battery Acid.** If splashed, immediately wash affected area with clean water and baking soda for at least 15 minutes. If irritation persists get medical help immediately.
13. **Connect Off Road Light cables to proper polarities.** Connect black cable to the negative battery terminal, and the red cable to the positive battery terminal (For a negative grounded system). Failure to do so could result in sparks, possible fire and severe personal injury.
14. **Keep cables clear of fan blades, belts, pulleys, and other moving parts of the engine that may cause injury, or damage to the Off Road Light.**
15. **Do not allow the Black and Red battery cables or terminals to touch.** Failure to adhere to these directions could result in severe personal injury. If this happens, sparks will occur that can melt connection lugs, or other metal objects, and create the potential for fire.
16. **Read all instructions and warnings on any battery or automotive electrical systems before working on vehicle.**
17. **Do not expose the battery or bare wires, switches or connections to rain or wet conditions.**
18. **To avoid damage of cable and plug, never pull the cable to disconnect the Fog Lights.**
19. **Always unplug the Off Road Light from their electrical connection and allow to cool completely before performing any inspection, maintenance, or cleaning procedures.**
20. **Repairs should be carried out only by a qualified technician.**
21. **An appropriate in-line switch and fuse are essential to help prevent fire in the event of a short circuit.** These components are not included in this kit and will need to be provided by the customer.
22. **This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.** (California Health & Safety Code § 25249.5, *et seq.*)
23. HID lamps emit ultraviolet, visible, and infrared radiation. HID bulbs operate at very high temperatures and pressures. Possible skin or eye irritation can result from exposures exceeding 15 minutes. Do not stare at exposed lamp in operation. During operation, the bulb should be enclosed in a housing to prevent injury. Do not remove bulb from equipment until it has cooled completely. Never handle the bulb when it is operating or until it has cooled!

About High Intensity Discharge (HID) Lamps

High Intensity Discharge (HID) lamps use a gas capsule rather than a filament inside the bulb. Light is created by an electrical arc between two electrodes sealed in the bulb. A ballast is required to provide the proper voltage and maintain current control. HID bulbs create more light than a comparable halogen lamp, and the light is closer in color to natural daylight than halogen light.

In HID lamps, the light is produced by creating an electrical arc in a metal vapor. Free electrons colliding with an atom in the vapor momentarily knock an electron into a higher orbit of the atom. When the displaced electron falls back to its former level, a quantum of radiation is emitted. The wavelength of light produced depends on the shell level of the disturbed electron and on the element and ionization of the metal vapor used in the arc tube.

Although producing only 5% of its output when first ignited, after a few seconds the HID lamp will come up to full output. Also, if power to the lamp is lost or turned off, the arc tube must cool before the arc can be restruck and light produced.

HID lighting has several advantages over conventional halogen lights:

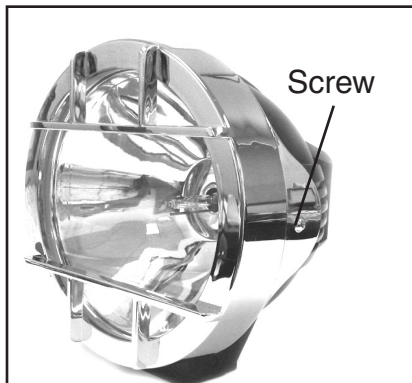
- **More light output.** An HID light source produces light at approximately three to five times halogen's efficiency. Efficiency is measured in lumens per watt, a measure of the amount of light produced for a given amount of electrical consumption. An HID lamp's lumens per watt (LPW) efficiency is roughly six to eight times that of an incandescent lamp.
- **Brighter light.** The color of HID lighting is closer to natural daylight than halogen or incandescent light, which appear yellowish in comparison. Florescent light appears more green than natural daylight. Light color is described in degrees Kelvin. Typical color temperatures are 2800K (incandescent), 3000K (halogen), 4100K (cool white or SP41 fluorescent), and 5000K (daylight-simulating fluorescent colors). HID lights produce a light with a color temperature at or above 5000K. Higher temperature lights appear brighter and bluer than lower temperature lights.
- **Longer Service Life.** An HID lamp will last, on the average, 3 to 5 times as long as a halogen bulb. In normal use, your HID bulb should last more than one thousand ignitions.

Unpacking

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at: 1-800-444-3353

Package should include: (1) 9" HID Off-Road Light, (1) Wiring Harness, (1) manual.

Bulb Replacement



To replace the bulb, remove the two screws (one on each side), that hold the lens cover on. See illustration to the left. Next remove the old bulb and replace it. Replace the Lens Cover using the same screws.

WARNING: Never touch the bulb with your bare hands. Oil from your fingers will damage bulb.

Installation

Warning: Before Installation, disconnect negative battery cable then disconnect the positive battery cable, in that order.

Warning: Whenever drilling, be sure that the drill will not damage any wires, tubes or components on either side of the member being drilled. Plan for your installation so units will be located conveniently and wires will be routed out of the way of any other components. Plan to fill all drilled holes with sealant to prevent water intrusion or rust.

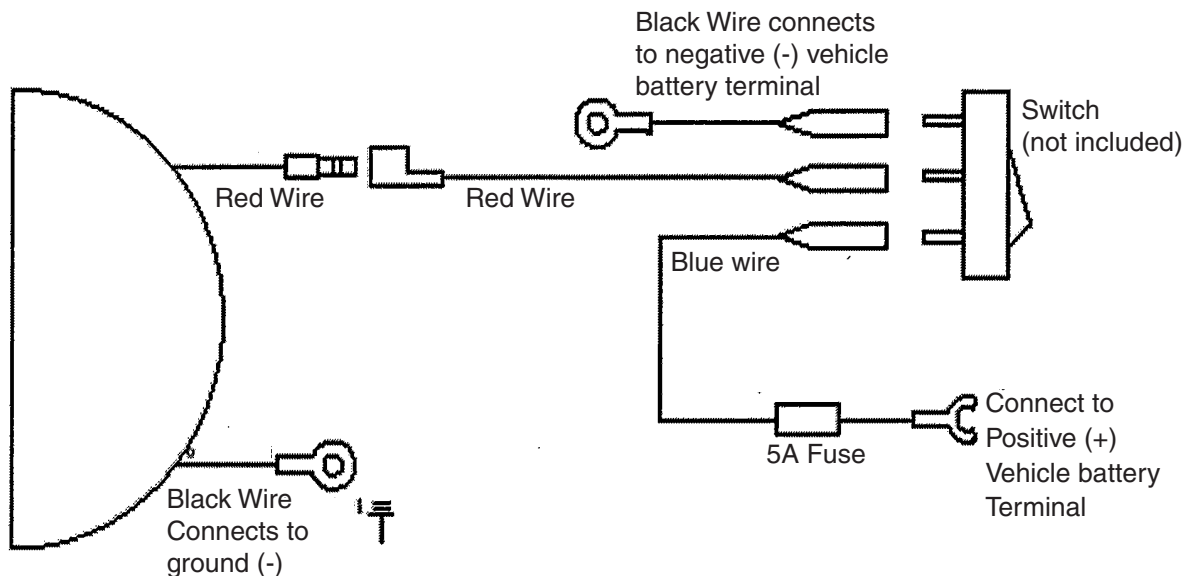
1. **Lamp Installation:** Fasten the Off Road Light to your vehicle. Adjust angle of lamp as desired. Connect the ground wire from the light to a clean grounded piece of metal on the vehicle frame.
2. **Install switch (not included) in passenger compartment.** Connect the blue wire (with inline 5A fuse holder) to the switch and to the positive battery terminal. Attach one appropriately-sized red wire to the switch. Carefully route two more wires from the other positive terminal on the switch to the lights. See the diagram below.

WARNING: Do not damage any cables, hoses or components when installing any component of this kit. Take care not to route wires where they may get tangled, pinched, cut, burned or otherwise damaged by the operation of the engine or movement of the car.

1. Connect positive wires from the light switches to the lights.

CAUTION: Do not reverse polarity, as that will damage unit.

1. Reconnect the vehicle positive battery cable. Test lights.
2. Be sure the Off-Road Lights, ballasts and switch are firmly attached and will not come loose during normal driving or a sudden stop.
3. Periodically check the Off-road Lights to be sure they remain in place. Make any adjustments as needed.



Operation

1. With the vehicle running, turn on the HID Light using the Switch (not included).

Care and Troubleshooting of your HID Lights

CAUTION: The lens of the lamps must be kept clean. The lamps should be handled with care, giving special attention to bulb.

WARNING: **NEVER TOUCH THE BULB WITH YOUR BARE HANDS!** The oil from your fingers will cause the bulb to explode!

1. Maintain proper electrical wiring polarity to prevent damage to the lamp.
2. Protect the quartz arc tube when handling the lamp. Keep the arc lamp clean. Do not touch the quartz tube or the inside surface of the reflector. If tube or reflector are dirty, clean with rubbing alcohol. Allow to dry completely before lighting.
3. The bulb and ballast are sensitive to external operating temperature. Do not expose to extremely high or low ambient temperature.
4. Periodically clean the lamp by wiping with a lint free towel or swab immersed in denatured alcohol. Allow to dry completely before lighting.
5. While HID bulbs last considerably longer than halogen bulbs, several characteristics indicate that a bulb is approaching the end of its life-span. Initial symptoms of end-of-life include low light output and/or intermittent starting. Visual signs include blackening at the ends of the arc tube and electrode tip deterioration. Note that HID bulbs contain metals, including mercury, that can be harmful to the environment. Please dispose of any HID bulb in accordance with local, state, and federal regulations.
6. All lamps have a limited lifespan. However, if you are experiencing problems with your HID light inspect the following:
7. **Bulbs:**
 - Inspect for broken arc tube or outer lamp jacket
 - Check connection where lamp broken where glass meets the base
 - Make a visual inspection of the bulb for broken or loose components in lamp envelope
 - Inspect for arc tube end blackening
 - Inspect for deposits inside the outer glass envelope
9. **Ballast and Capacitor points-of-failure:**
 - Attempt ignition a second time after properly resetting the ballast by disconnecting, waiting 15 seconds, and then reconnecting the connectors attached to the lid.
 - Are you using identical replacement lamps? Your ballast will not work with incorrect watt-age lamps.
 - Avoid possible overheat due to ambient temperature
 - Inspect for miswiring/pinched wires
 - Inspect ballast housing and wiring for mechanical damage

The Bulb is the only replacement part offered. Call 1-800-444-3353 to order the bulb.

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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